

REMARKS

The foregoing amendments and these remarks are in response to the Office Action dated July 6, 2009. Applicant hereby requests a three month extension of time for filing this response. Authorization is given to charge the appropriate fees to Deposit Account No. 50-0951.

At the time of the Office Action, claims 1-12 were pending. In the Office Action, claim 1 was rejected under 35 U.S.C. §112, second paragraph. Claims 2-12 were objected to as being dependent upon a rejected base claim. Claims 1-12 were rejected under 35 U.S.C. §103(a). The rejections are discussed in more detail below.

I. Rejection under 35 U.S.C. §112

Claim 1 was rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. In particular, the phrase "substantially parallelepiped, flattened overall dimension" was alleged to be unclear. Applicant has deleted this phrase from claim 1.

Claims 2-12 were objected to as being dependent upon a rejected base claim and for including "characterized in that" language. Applicant notes that the preliminary amendment filed concurrently with the application that replaced "characterized in that" with "wherein" does not appear to have been entered. Accordingly, the claims are amended herein based on the PCT claims, and repeating the amendments made in the previously filed preliminary amendment. As a result of these modifications, Applicant respectfully requests withdrawal of the rejection.

II. Rejections based upon art

Claims 1-12 were rejected under 35 U.S.C. §103(a) as being obvious over European Patent No. 1,279,915 to Filippi et al. (hereafter "*Filippi*") in combination with U.S. Patent No. 7,104,314 to Valensa et al. ("*Valensa*"). Applicant submits that claim 1 is patentable over this reference.

Filippi discloses a catalytic reactor comprising a plurality of plate heat exchangers, formed by a pair of juxtaposed metallic plates mutually adjoined in a predetermined space relationship by perimetric welds. Notably, plate-shaped heat exchangers are conceptually and structurally different with respect to tubular heat exchangers. Therefore, they cannot be confused with or compared to heat exchangers of the tubular type. The reactor according to *Filippi* suffers from a recognized drawback, which is the noncapability of withstanding high pressure differences between the inside and the outside

of the exchangers themselves (see description of the present application, page 2, lines 6-18).

Valensa does not disclose a chemical reactor, in which heat exchangers are supported in a reaction zone. Instead, the heat exchanger disclosed in *Valensa* is designed to operate outside of a reaction zone. Such a heat exchanger is used in fuel processing subsystems of fuel cell systems to transfer heat between a reformat flow and a coolant flow to cool the reformat flow prior to entry into a carbon monoxide removal unit. Moreover, it should be noted that apart from the fact of having flattened tubes 46, 47, the heat exchanger 10 disclosed in *Valensa* differs from the chemical reactor of the present application with respect to all other features recited in present claim 1. Furthermore, there is no indication in *Valensa* about the capability of withstanding high pressure differences between the inside and the outside of the tubes 46, 47. Therefore, a skilled person in the art examining *Filippi* at the time of the invention would have not considered *Valensa* as relevant prior art. Even if these two prior art documents were combined, the skilled person would have not obtained the reactor as claimed.

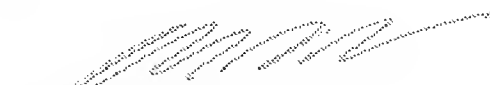
Claim 1 is thus believed to be patentable over the cited prior art for at least the foregoing reasons. The dependent claims are also believed allowable because of their dependence upon an allowable base claim, and because of the further features recited.

III. Conclusion

Applicants have made every effort to present claims which distinguish over the prior art, and it is thus believed that all claims are in condition for allowance. Nevertheless, Applicants invite the Examiner to call the undersigned if it is believed that a telephonic interview would expedite the prosecution of the application to an allowance. In view of the foregoing remarks, Applicants respectfully request reconsideration and prompt allowance of the pending claims.

Respectfully submitted,

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